U.S.-CANADIAN TRADE IN FROZEN GROUNDFISH PRODUCTS, 1970-1981

Roger Corey

Economics

CIRCULATING COPY
Sea Great Depository

EGAN COMY ONLY



NOAA/Sea Grant University of Rhode Island Marine Memo 70

Note:

Much of this analysis—especially U.S. data prior to 1976—is based on an earlier study, which may be consulted for a more complete understanding of U.S.—Canadian trade in fish. See J. B. Dirlam and D. Wang, <u>Canadian</u>

Trade Practices and Policies Relative to Fish Commodities, Dept. of Commerce, under Contract #7-35365 (7/5/78).

Edited by Christine Duerr

This publication is the result of research partially sponsored by NOAA Office of Sea Grant, U.S. Department of Commerce, under Grant #NA79AA-D-00096. The U.S. Government is authorized to produce and distribute reprints for governmental purposes notwithstanding any copyright notation that may appear hereon.

Additional copies of this publication are available from URI, Marine Advisory Service, Publications Unit, Bay Campus, Narragansett, RI 02882. P 922

INTRODUCTION

The United States import market, particularly for frozen fish products, is extensive. Between the years 1970 and 1981 this need has provided Canada, for one, a major market for its exports of fresh and frozen fish and allowed it to become a prime supplier of U.S. import needs.

This relationship demonstrates a high degree of interdependency between the United States and Canada; however, interestingly enough the dependency is uneven. The U.S. is less dependent upon Canada as a supplier than Canada is on the U.S. as a purchaser.

This analysis attempts to describe briefly the trade relationship between the U.S. and Canada through the last decade and illustrate changes in relative dependency between the two nations. Special attention is given to New England, as this region is particularly affected by international trade in groundfish products.

The species under consideration are classified as groundfish and include Atlantic cod, cusk, hake, haddock, pollock and flatfish (primarily flounder and turbot). These fish constitute most of New England's landings of food fish. The vast majority of these landings, in turn, are intended for consumption as fresh fish, which ultimately brings a much higher price from the consumer than does frozen fish and, in addition, costs less to be processed, handled, etc.

Currently New England fishermen are caught in a tight economic situation. Consumer demands per capita for fresh and frozen fish has only risen moderately in the past decade and, in 1980, registered a drop of .2 to 13 pounds. At the same time the passage of the 1976 Fishery Conservation and Management Act, now called the Magnuson Act, extending the U.S. fishing limit to 200

miles, precipitated an increase in the harvesting sector. Landings of edible fishery products went up from 2.8 billion lbs. in 1976 to 3.7 billion in 1980. Also, operating costs, largely due to fuel prices and high financing payments, have risen. Fishermen thus can ill afford competitive pressure that reduces exvessel prices. Such pressure comes from imports of fresh and frozen fish, largely from Canada. Subsidization of the Canadian fishing industry by its government allows imports into the U.S. to outcompete U.S. products in many Insofar as imports displace U.S. fish from the wholesale market, these damage the U.S. fisherman as he then has fewer buyers for his fish. In certain regions, such as New England, fish is largely destined for the fresh market through restaurants and other institutions. For these buyers it makes little difference whether the fish has been frozen or not; the prime consideration becomes cost. Canadian imports usually come into the country processed as fillets at a price much lower than U.S. processors can offer using domestic The result is the purchase of imported fish over domestic even at some restaurants or institutions located adjacent to large fish piers. Therefore frozen imports become an effective competitor with U.S. fish.

FROZEN GROUNDFISH FILLETS AND STEAKS

The market for frozen groundfish fillets illustrates well the relative dependency of the two nations. Canadian groundfish constituted less than one-half of all U.S. groundfish fillets imported in 10 out of the last 11 years. The U.S. is very dependent upon imports of this product; imports were more than ten times the quantity produced domestically from 1970 to 1979. Looking more closely at groundfish production, it can be seen from Table 1 that U.S. production of frozen fillets is a very small proportion of total supply 8% or less since 1970. Imports, recently 40-50% of which have been Canadian fish, account for the majority of the supply of frozen groundfish fillets.

The reason for U.S. domestic production being so low is that U.S. processors cannot compete against frozen imports. By the time their costs are added to the comparatively higher ex-vessel price of fish in the U.S., the U.S. processor cannot compete against frozen imports of Canadian ground-fish. As an illustration, in 1980 the average monthly price for imported Canadian frozen cod fillets was 89.4¢ per pound. At the same time, the U.S. average monthly ex-vessel price for cod was 28.4¢ per pound. Since this is for drawn fish, not fillets, this ex-vessel price must be converted to a fillet equivalent. It takes 2.63 pounds of drawn cod to get 1 pound of cod fillets, so one must multiply the drawn cod price of 28.4¢ per pound by the conversion factor of 2.63 to get the actual cost of the fillets at 74.7¢ per pound. This is what it costs the processor for cod fillets, exclusive of his additional costs of processing the drawn fish into fillets. This raw material cost leaves the processor with only 14.7¢ per pound to cover his other expenses.

Nevertheless, total U.S. production of frozen groundfish fillets rose in 1979 to nearly 130% of the 1970-76 average, still remaining a relatively low 8.2% of total supply. This was due largely to the growth in the harvesting sector caused by the 200-mile limit extension.

New England landings are the source for a large proportion of the U.S. domestic production of groundfish fillets and steaks. For instance, according to the National Marine Fisheries Service (NMFS) data, New England production of fresh and frozen cod fillets and steaks in 1979 was nearly 30 million pounds, or 88% of total U.S. production. This production amounted to a 35% increase for 1979, which was followed by a 1980 decrease (Table VI). Data for other species of groundfish show similarly high proportions. It must be remembered that in Tables VI and VII all but the import data columns

group fresh and frozen fish together. Comparisons of fresh versus frozen fish in the New England market is severely restricted by the limited data available.

Imports to the U.S. also registered a rise, along with the U.S. increase in production, to 45% in 1979, thus making the total supply of frozen fillets much higher than in previous years (Table 1). Canadian imports of frozen groundfish fillets also rose slightly to almost 40% of the total U.S. imports. In 1981 imports of frozen groundfish fillets into New England jumped 86% as of June, over Jan-June 1980.

Production in New England is largely of fresh fillets and Canadian imports largely of frozen fillets. However, there is a rising trend towards imports of fresh fillets from Canada reaching a total of 8 million pounds in 1980 compared with 5.5 million in 1978. For the first 6 months of 1981 it is estimated that Canadian fresh fillets of groundfish imports almost equalled the 1980 total, being 56% over the same period last year. Imports of fresh whole groundfish through June 1981 were over 12 million lbs, or 91% higher than corresponding levels in 1980.

FROZEN BLOCKS

U.S. production of frozen blocks, of all species, is also insignificant compared with total supply (Table II). Again it is to be noted that U.S. processors cannot produce blocks from domestic product at a competitive price with imports. The overwhelming majority of blocks used in the U.S. comes from imports, which have been increasing in quantity since 1970. Canada supplied only 31% of the U.S. imported blocks, largely groundfish blocks, in 1980. This compares with 30% in 1970 and a ten-year low of 12% in 1975.

CANADIAN DEPENDENCY

Figures obtained from the U.S. and Canadian governments illustrate that Canadian fishermen have a very high dependence on the U.S. frozen fish market. Over the last 7 years, 70% of total Canadian exports of frozen fillets and steaks of all species grouped together go to the U.S. Since 1974 an average of 95% of all Canadian exports of block of all species were bound for the U.S. For frozen groundfish fillets and steaks this ratio is higher still—96% of all Canadian exports go to the U.S.

This dependence is made more evident when one takes into consideration exports into the U.S. as a percentage of total Canadian production of fish. From 1974 to 1978, this ratio for frozen groundfish averaged 76%; for blocks of all species, 73%; and for frozen fillets and steaks of all species, 58% (Tables III-V).

Canada has been reducing her dependency on the U.S. market for ground-fish fillets and steaks. In comparison with total Canadian production, the export rate from 1974 to 1978 rose slower than did the Canadian production. Table III illustrates the decline in the ratio of U.S. bound exports of all frozen fillets and steaks to production as such exports increased only 29% while production rose 70% in the same period of time.

A reversal of what is taking place in the frozen groundfish fillet and steak export picture is occurring with blocks. Canadian production of frozen blocks of all species has not kept pace with exports (as evidenced by Table IV). Exports of blocks to the U.S. increased more than did production during the five years from 1974 to 1978. This has caused a rising ratio of exports to the U.S. to production, or a greater dependency on U.S. markets.

CONCLUSION

There has been concern over increased levels of U.S. imports of ground-fish from Canada and their competitive effects on the New England groundfishing industry. As mentioned before, there were extraordinarily large increases in imports of various groundfish products into the U.S.; moreover, the percentage increases appear to have been higher into the New England region.

This increase in imports of frozen fillets and blocks is a disturbing sign for the U.S. While it was thought that the extension of the U.S. fishing limits in 1976 would help ease the U.S. fishermen's plight, the industry continues to suffer economically. To a large extent, it is commonly felt this is due to relatively unrestricted importation of fish, combined with an unwillingness by the U.S. government to offer financial aid to fishermen. This is a matter that may require further investigation.

Finally, when viewed over a longer period of time, few trends or patterns in exports and production are immediately evident. Yet while the ratios discussed in this report move up and down irregularly over the past ten or fifteen years, current levels of exports into the U.S. from Canada, as a percentage both of total exports and of Canadian production, seem to be similar to long run averages; that is, the high dependency of Canada on the U.S. market appears to be a long-term, continuing relationship. It may be in the best interest of Canada to keep this market, for without it, Canadian fishermen have fewer outlets for their fish and their incomes may suffer as a result. It is another question whether or not there needs to be action taken to improve the U.S.'s self-reliance in the frozen fillets and blocks markets. There are political factors involved, yet insofar as economics is concerned, what is desired is a market which is as free as possible—on both sides—in order to improve efficiency and product quality, and to provide the consumer with an adequate supply of fish at low prices.

Table I. U.S. Production, Imports, and Supply of Frozen Groundfish Fillets (in millions of pounds)

Year	Prod. 1	Imports ²	Change in Inv.1	Supply ³	Canadian Imp.4	Canad. Prod.	Imp. as a % Supply	of Imp.
1970	12.1	203.7	- 0.1	215.9	92.8	766.9%	43.0%	45.6%
1971	9.1	184.4	+ 5.1	188.4	75.2	826.4	39.9	41.0
1972	9.1	250.4	-10.3	269.8	74.0	813.2	27.4	29.6
1973	14.6	264.7	-14.1	293.4	67.0	458.9	22.8	25.3
1974	14.4	200.9	+ 1.8	213.5	106.1	736.8	49.7	52.8
1975	9.2	256.1	- 8.6	273.9	116.3	1264.1	42.5	45.4
1976	9.1	N.A.	- 3.0	N.A.	116.9	1284.6	N.A.	N.A.
1977	N.A.	268.1	+14.9	N.A.	105.9	N.A.	N.A.	39.5
1978	18.5	279.8	- 2.0	300.3	130.4	704.9	43.4	46.6
1979	25.3	281.3	- 1.7	308,3	110.3	436.0	35.8	39,2

¹NMFS, Current Fisheries Statistics

²NMFS, Fisheries of the United States

 $^{^{3}}$ Calculated: Production + Imports + Change in Inventory

⁴NMFS, Resource Statistics Division

Table II. U.S. Production, Imports and Supply of Frozen Blocks. All Species (in millions of pounds)

<u>Year</u>	Prod.	Imports	Change in Inv.	Supply	Canadian Imp.	Canad. Prod.	Imp. as Supply	a % of Imp.
1970	3.9	272.7	- 12.3	288.9	82.4	2112.8%	28.5%	30.2%
1971	6.2	311.2	+ 32.1	285.3	91.0	1467.7	31.9	29.2
1972	3.6	355.5	+ 13.1	346.0	64.6	1794.4	18.7	18.2
1973	9.9	358.7	+ 4.8	363.8	68.0	686.9	18.7	19.0
1974	4.4	266.1	- 4.9	275.4	35.7	811.4	13.0	13.4
1975	2.4	313.5	+ 3.3	312.6	38.6	1608.3	12.3	12.3
1976	1.7	378.7	- 17.9	398.3	54.4	3200.0	13.7	14.4
1977	2.0	385.1	+ 12.1	375.0	83.0	4150.0	22.1	21.6
1978	1.9	406.3	- 1.3	409.5	83.8	4410.5	20.5	20.6
1979	4.9	408.2	- 9.4	422.5	106.9	2181.6	25.3	26.2
1980	0.6	336.1 ¹	- 15.8	352.5	102.6	17100.0	29.1	30.5

^{1&}lt;sub>NMFS</sub>, Fisheries of the United States

²NMFS, Current Fisheries Statistics

³Calculated: Production + Imports + Change in Inventory

⁴NMFS, Resource Statistics Division

Table III. Canadian Production and Exports of Frozen Groundfish Fillets & Steaks (in millions of pounds)

Year	Production ¹	Exports	Exports to U.S.	Exports to U.S. a	s % of Exports
1974	136.7	106.6	106.1	84.5%	99.6%
1975	145.9	117.1	116.3	79.7	99.4
1976	154.1	117.5	116.9	75.8	99.5
1977	151.8	109.0	105.9	69.7	97.1
1978	183.6	132.8	130.4	71.0	98.1
1979 ²	N.A.	158.9	135.0	N.A.	85.0
1980 ²	N.A.	138.0	128.9	N.A.	93.4

 $^{^1}$ Includes Atlantic fisheries only (in 1977-78 this accounted for over 97% of total Canadian production)

Source: Fisheries and Oceans Canada, <u>Annual Statistical</u>
Review of Canadian Fisheries

²Excludes cusk, hake and pollock

Table IV. Canadian Production and Exports of Frozen Fish Blocks (in millions of pounds)

	-		Exports	Exports to U.S	. as % of
Year	Production	Exports	to U.S.	Production	Exports
1974	52.5	36.3	35.6	67.8%	97,9%
1975	52.5	40.1	37.9	72.2	94.5
1976	71.2	54.6	52.1	73.2	95,5
1977	109.0	85.8	82.8	76,0	96.5
1978	113.9	91.4	88.8	77.9	97,1
1979	N.A.	118.8	114.3	N.A.	96.2
1980	N.A.	139.9	123,5	N.A.	88.3

 $^{^{1}}$ Includes Atlantic fisheries only (in 1977-78 this accounted for over 95% of total Canadian production)

Source: Fisheries and Oceans Canada, Annual Statistical Review of Canadian Fisheries

Table V. Canadian Production and Exports of Frozen Fillets & Steaks, All Species (in millions of pounds)

<u>Year</u>	Production 1	Exports	Exports to U.S.	Exports to U.S Production	. as % of Exports
1974	160.3	118.2	107.8	67.2%	91.2%
1975	177.8	150.4	119.0	66.9	79.1
19 76	212.2	165.7	119.6	56.3	72.1
1977	226.6	202.6	110.2	48.6	54.4
1978	271.7	218.8	139.1	51.2	63.6
1979	N.A.	214.5	155.4	N.A.	72.5
1980	N.A.	207.5	138.6	N.A.	66.8

 $^{^{1}}$ Includes Atlantic fisheries only (in 1977-78 this accounted for over 95% of total Canadian production)

Source: Fisheries and Oceans Canada, Annual Statistical Review of Canadian Fisheries

Table VI.

New England Production, and Canadian Imports of Groundfish Fillets and Steaks, 1978-1980 (in millions of pounds)

				-1978-			
Species	Production	Can In Fresh	np. into M Frozen	Total	Change ³ in Inv.	Supply ⁴	Can. Imports as % of Supply
Cod	22.20	2.55	34.0	36.55	+ 5.21	53.54	68.3%
Cusk,Hake, Haddock and Pollock	1 29.15	2.54	15.80	18.34	- 3.47	50.96	34.0
Flatfish	25.70	0.47	48.0	48.47	- 1.34	75.51	64.2
Total	77.05	5.56	97.8	103.36	+ 0.40	180.01	57.4
				-1979-			
Species	Production	Can. I Fresh	mp. into Frozen	N.E. Total	Change in Inv.	Supply	Can. Imports as % of Supply
Cod	29.89	5.26	40.25	45.51	- 0.72	76.12	60.0%
Cusk, Hake, Haddock and							
Pollock	32.19	2.67	17.0	19.67	- 0.76	52.62	37.4
Flatfish	27.98	0.73	47.23	47.96	+ 2.62	73.32	65.4
Total	90.06	8.66	104.48	113.14	+ 1.14	202.06	56.0
				-1980-			
		Can. I	mp. into	N.E.			
Species	<u>Production</u>	Fresh	Frozen	Total	in Inv.	Supply	as % of Supply
Cod	28.12	4.60	41.98	46.58	- 9.16	83.86	55.5%
Cusk, Hake, Haddock and	27.00	2.07	15.00	10.07	. 1 50	12.20	. (2.7
Pollock	26.00	3.04	15.90	18.94	+ 1.58	43.36	43.7
Flatfish	27.88	0.48	38.07	38.5 5	+ 2.67	63.76	60.5
Total	82.00	8.12	95.95	104.07	- 4.91	190.98	54.5

^{1978-79,} NMFS, Current Fisheries Statistics; 1980, calculated & using N.E. landings as proxy for production

²NMFS, Resource Statistics Division

³NMFS, blue sheets

⁴Calculated: Production + Imports + Change in Inventory

Table VII. New England Production and Canadian Imports of Groundfish Fillets and Steaks (in millions of pounds)

1st 6 months, 1980 - 1981

-1980-

			- .	1900-			
Species	Production ¹	Can. I	Imp. into Frozen	N.E. ² Total	Change ³ in Inv.	Supply ⁴	as % of Supply
Cod	7.98	3.41	20.90	24.31	+ 1.58	30.70	79.2%
Cusk, Hake Haddock ar Pollock Flatfish Total		1.58 0.13 5.12	6.25 12.39 39.54	7.83 12.52 44.66	- 0.78 -11.76 -10.96	20.81 38.22 89.74	37.6 32.8 49.8
			-:	1981-			
Species	Production	Can. I	Imp. into Frozen	Total	Change in Inv.	Supply	Can. Imports as % of Supply
Cod	13.3	4.20	36.21	40.41	+ 2.67	51.04	79.2

breezes z	Toddecaton						
Cod	13.3	4.20	36.21	40.41	+ 2.67	51.04	79.2
Cusk, Hake, Haddock and Pollock	14. 0	2.96	10.62	13.58	- 1.89	29.47	46.1
Flatfish	14.62	0.83	26.90	27.73	- 1.40	43.75	63.4
Total	41.92	7.99	73.73	81.72	- 0.62	124.26	65.8

 $^{^{1}\}text{Calculated}$ from NMFS, blue sheets, using N.E. landings as proxy $^{2}\text{NMFS}$ Resource Statistics Division $^{3}\text{NMFS}$, blue sheets $^{4}\text{Calculated:}$ Production + Imports + Change in Inventory

Table VIII. Canadian Exports of Selected Fish Products into New England, 1978-81 (in thousands of pounds)

Product	<u>1978</u>	<u>1979</u>	1980	% Change 1978-80
Whole, fresh:				
Cod	1,492	3,138	3,140	+110.5%
Cusk, Hake, Haddock,		ć 501	7 (20	. 21 7
and Pollock	5,799	6,534	7,639	+ 31.7
Flatfish	1,514	2,790	2,215	+ 46.3
Total	8,805	12,463	12,994	+ 47.6
Filleted, fresh:				
Cod	2,548	5,259	4,605	+ 80.7
Cusk, Hake, Haddock,	·			
and Pollock	2,541	2,664	3,044	+ 19.8
Flatfish	472	730	480	+ 1.7
Total	5,561	8,652	8,129	+ 46.2
Filleted, frozen:				
Cod	33,991	40,251	41,980	+ 23.5
Cusk, Hake, Haddock,	•	·		
and Pollock	15,796	16,987	15,900	+ 0.7
Flatfish	47,965	47,231	38,071	- 20.6
Total	97,752	104,469	95,950	- 1.8
Blocks, frozen:				
Cod	61,877	86,009	82,258	+ 32.9
Haddock	2,116	2,252	2,496	+ 17.9
Pollock	1,593	740	1,890	+ 18.6
Flatfish	14,438	14,811	12,078	- 16.4
Total	80,024	103,812	98,722	+ 23.4
		,		

Table IX. Canadian Exports of Selected Fish Products into New England, (in thousands of pounds)

lst	6	Months,	1980-81

Product	JanJune 1980	JanJune 1981	% Change
Whole, fresh:			
Cod Cusk, Hake,	2,523.3	4,258.3	68.8%
Haddock and		7 165 0	100.5
Pollock	3.573.3	7,165.9 797.0	167.6
Flatfish	297.8	12,221.1	91.1
Total	6,394.4	12,221.1	91.1
Filleted, fresh:			
Cod	3.405.5	4,199.5	23.3
Cusk, Hake,			
Haddock and		- 0(1.0	07.0
Pollock	1,578.5	2,964.3	87.8 534.7
Flatfish	131.3	833.3	56.3
Total	5,115.3	7,997.1	30.3
Filleted, frozen:			
Cod	20,903.9	36,215.0	73.3
Cusk, Hake,			
Haddock and			
Pollock	6.252.0	10,616.6	69.8
Turbot	3,001.4	4,056.1	35.1
Other Flatfish	9,392.9	22,845.0	143.2 86.4
Total	30,550.3	73,732.7	00,4
Blocks, frozen:			
Cod	40,357.9	38,422.5	(4.8)
Haddock	1,193.3	6,559.3	449.7
Pollock	860.7	1,215.9	41.3
Turbot	766.8	1,621.5	111.5
Other Flatfish	2,977.1	4,277.6	43.7
Total	46,155.8	52,096.8	12.9

Source: NMFS, Resource Statistics Division

Table X. Canadian Exports of Selected Fish Products into the U.S., 1978-81 (in thousands of pounds)

Product	1978	<u>1979</u>	1980	% Change 1978-80
Whole, fresh:				
Cod	2,103	3,763	3,638	+ 73.0%
Cusk, Hake, Haddock, and Pollock	5,862	6,591	7,650	+ 30.1
Flatfish	1,750	2,872	2,459	+ 40.5
Filleted, fresh:				
Cod	3,896	8,251	6,794	+ 74.4
Cusk, Hake, Haddock,	0.00/	2 (22	2 444	+ 15.0
and Pollock	2,994	3,632	3,444	+ 39.0
Flatfish	750	1,186	1,044	+ 47.7
Tota1	7,639	13,069	11,282	T 47.7
Filleted, frozen:				
Cod	35,450	43,367	53,807	+ 51.8
Cusk, Hake, Haddock	الدو ميساني والسابي			
and Pollock	16,283	17,696	16,646	+ 2.2
Flatfish	50,120	49,202	39,267	- 21.7 + 7.7
Total	101,853	110.265	109,720	+ /./
Blocks, frozen:				
Cod	65,555	88,875	85,580	+ 30.5
Haddock	2,119	2,254	2,506	+ 18.3
Pollock	1,609	795	2,162	+ 34.5
Flatfish	14,472	14,940	12,372	- 14.5
Total	83,755	106.865	102,620	+ 22.5

Table XI. Canadian Exports of Selected Fish Products into the U.S., (in thousands of pounds)

1st 6 Months, 1980-81

Product	JanJune 1980	JanJune 1981	% Change
Whole, fresh:			
Cođ	2,829	4,484	58.5%
Cusk, Hake, Haddock	3,584	7,178	100.3
and Pollock	437	1,038	137.5
Flatfish Total	6,850	12,700	85.4
IOLAI	0,000	12,700	
Filleted, fresh:			
Cod	4,896	5,143	5.0
Cusk, Hake, Haddock	4,050	- ,	
and Pollock	1.858	3,402	83.1
Flatfish	610	1,256	105.9
Total	7,364	9,801	33.1
			···········
Filleted, frozen:			
Cod	21,903	36,717	67.6
Cusk, Hake, Haddock	22,700	- ,	
and Pollock	6,568	10,821	64.8
Turbot	3,184	4,139	30.0
Other Flatfish	9,715	22,998	136.7
Total	41,370	74,675	80.5
	·		
Blocks, frozen:			
G-4	41,687	38,961	(6.5)
Cod	1,204	6,644	451.8
Haddock Pollock	973	1,305	34.1
Turbot	782	1,626	107.9
Other Flatfish	3,015	4,278	41.9
Total	47,661	52,814	10.8
IULAI	47,9002	, ·	

Source: NMFS, Resource Statistics Division